

83447	מספר: Number
8 AUG 1987	תאריך: Date
הוקדם/נדרחה Ante/Post-decl	

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בקשה לפטנט  
Application for Patent

אני, (שם המבקש, מענו ולגבי נוף מאוגד - מקום התאגדותו)  
I (Name and address of applicant, and in case of body corporate-place of incorporation)

קלמן לסלר, הגר ברחוב מרסיי 18/2; קרית-שפרינצק, חיפה,

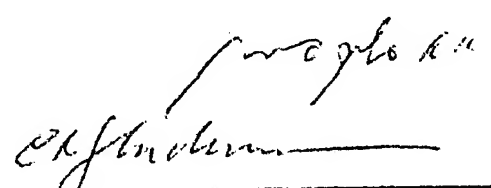
Kalman LASZLO, of 18/2 Marseille Street, Kitiat Sprinzak, Haifa,

בעל אמצאה מכח הידתי הממציא  
Owner, by virtue of being the inventor  
of an invention the title of which is

שיטה משוכללת לעשיית תרתורת ניידות  
(בעברית)  
(Hebrew)

IMPROVED METHOD OF MAKING REMOVABLE DENTURES  
(באנגלית)  
(English)

הבקש בואת כי ינתן לי עליה פטנט  
hereby apply for a patent to be granted to me in respect thereof.

• בקשת חלוקה - Application of Division		• בקשת פטנט מוסף - Application for Patent Addition			• דרישה רצן קדימה Priority Claim	
מבקשת פטנט from Application No. .... dated .....		• לבקשה/לפטנט to Patent/Appl. No. 68802 dated 26.05.1982		מספר/סימן Number/Mark	תאריך Date	מדינת האגוד Convention Country
• ישרי כח: כללי / מיוחד - רצוף בזה / צור יוגש P.O.A.: general/individual-attached/to be filed later- הוגש בענין 68802 filed in case 68802						
המען למסירת פטנטים בישראל Address for Service in Israel א.א. גלוקסמן, ת.ד. 6202 חיפה, 31060 E.A. GLUCKSMAN, P.O.B. 6202, HAIFA						
חתימת המבקש Signature of Applicant 		היום 5..... בחודש אב..... שנת 1987 of the year of This				
		לשימוש הלשכה For Office Use				

תאריך הפרסום: .....  
Publication date: .....  
תאריך הידוע: .....  
Date known: .....

8 7 3 3

שיטה משוכללת לעשיית תותכות ניידות

IMPROVED METHOD OF MAKING REMOVABLE DENTURES.

THE APPLICANT:-

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18/2 Marseille Street,  
HAIFA.

המבקש:  
קלמן לסלר,  
רחוב מרסיי 18/2,  
חיפה.

BACKGROUND OF THE INVENTION

In my Israeli Patent Specification No. 68802 I have disclosed a method of producing artificial dentures by using hollow posterior teeth. According to this method artificial

5 teeth are mounted on a denture base by means of wax, using conventional anterior teeth and hollow posterior teeth. The trial denture is placed into an articulator together with the opposite denture in a manner effecting contact between the maxillar and mandibular posterior teeth. After the wax holding

10 the teeth in position has sufficiently hardened, the articulator position is set to create a narrow space between the respective cusps. The hollow teeth are now filled with wax, and the articulator is moved in various directions to remove any protruding wax portions. The dentures are now placed into the

15 patient's mouth, whereby more superfluous wax is removed from the cusps of the hollow teeth by masticating motions of the patient. This results in the final shape of one or both dentures, which are now placed in a cast and the wax is melted out by heating. The thus-created hollow spaces, including these

20 in the hollow teeth, are filled with a liquid plastic material, in a known manner. After curing of the plastics material the denture or dentures are ready for wear.

Although this method of making removable dentures requires less sittings of the patient than before and obviates grinding of the occlusal teeth surfaces in the patient's mouth, it is my object to still improve the method and to shorten the production time, while improving the fit and quality of each denture.

Another object of my invention is to create physiologically formed dentures and teeth with a perfect chewing fit without requiring any subsequent grinding operations in or out of the patient's mouth.

An additional object of my present invention is to reduce the cost of artificial dentures, by reducing the actual working hours, particularly in case of a dental surgeon depending on the services of a dental laboratory not attached to his clinic.

In addition to the drawback of the many stages of the conventional method of making dentures, it has come to my attention that the surface of most dentures does not exactly conform to the contours of the mouth cavity. In spite of the fact that the dentist takes an exact impression of the upper or lower jaw, or of both, the technician does usually not take into consideration the tissue portions surrounding the jaw proper, but casts a denture base in the shape corresponding to the shape of the protruding portions only, while neglecting the muscular

system which should assist in keeping the denture in position, especially the mandibular denture. In fact most mandibular dentures are held in position by their weight only and, during chewing, by the pressure of the maxillary denture.

5           With the object of making a denture which should encompass the entire mouth contour, I have invented the following, non-conventional method, which includes preparing a final denture base, and placing the artificial teeth onto the ready base, instead of casting both base and teeth in a cast as a  
10 complete unit. This method has the great advantage of obtaining a true base which adheres to all parts of the jaw, in contradistinction to the conventional method, which requires major adjusting and grinding operations of the denture plate after its completion.

15

#### SUMMARY OF THE INVENTION

The method of making a denture base according to the present invention comprises: making a correct impression of the edentulous jaw and using it for preparing a positive plaster cast in a conventional manner. Preparing two identical,  
20 provisional base plates by vacuum-forming of a thermoplastic sheet, also in a conventional manner. The characteristic step of the invention consists in making a plaster die by using as a

pattern the two identical, provisional base plates in contiguous alignment, resulting in a trial denture base of sufficient thickness. This denture base is prepared from a transparent or translucent material, permitting the dentist to discern the marks  
5 of the crestline and the papillas in the mouth and on the cast.

The following step comprises the making of a pattern for the plaster die of the final base plate by using the trial base for obtaining a complete, true impression of the gums and the surrounding tissue in a known manner, by adding sufficient thermo-  
10 elastic material to the translucent base plate. This pattern is now used to make a plaster cast, whereby all undercut portions are filled with a rubber compound or the like elastic material to facilitate withdrawal of the completed plate after pressing. The plaster cast is furthermore characterized by its being divided  
15 into a lower portion reaching up to the widest-extending parts, i.e. the equator of the pattern, an intermediate portion surrounding the upper rim, and an upper portion. In this manner the final base plate is formed true to the mouth contours as defined by the last impression.

20 The final base is now provided with a thermo-elastic occlusal rim, again in a conventional manner, and the opposite denture bases are placed in the patient's mouth, with the object of defining the occlusal surfaces. Now, successively portions of

the occlusal rims are removed and replaced by artificial teeth:-  
the anterior teeth are of the conventional kind, while the  
posterior teeth are either tubular, i.e. completely hollow, or  
are provided with hollow cusp areas. The dentures, complete  
5 with teeth are now placed into an articulator and the teeth are  
adjusted for perfect fit and bite in a conventional manner.

Each denture composed of the final base plate and the  
conventional and hollow teeth attached thereto by means of the  
thermo-elastic occlusal rim portions, is now used to make a  
10 plaster-cast in the conventional manner, and the final denture  
is produced from a suitably colored resin, however while leaving  
the cusp spaces of the posterior teeth empty.

The step of casting the base is, however, modified  
compared with the conventional method, in that the liquid resin  
15 is poured into the cavity through a funnel into the vertically  
positioned casting die, while a riser permits gases and  
superfluous resin material to rise therethrough. This method is  
known as a method of casting metal bodies, up to now not been  
used for casting resin denture bases.

20 After curing the denture is placed into the patient's  
mouth, while the hollow teeth cusps are overfilled with a light-  
curing resin. The patient is asked to make chewing and other  
mouth movements, thereby removing the superfluous portions of

resin, whereafter the material is rapidly polymerized by passing a concentrated light source over the teeth. In this manner subsequent grinding is completely avoided, and the denture is completed in a much shorter time than before, and in a superior  
5 quality.

I repeat that the conventional method of making dentures has been improved by me with regard to the following steps only, leaving the other steps unchanged:-

1. Preparation of the final base plate and fastening thereto the  
10 teeth as a separate step, instead of preparing a casting die comprising both the base plate and the teeth and casting them as an integral unit, causing the baseplate itself frequently requiring grinding and adjusting owing to distortion during casting. According to my present method the baseplate is  
15 previously made to perfectly conform to the mouth contours requiring only the teeth themselves to be suitably attached thereto and adjusted prior to the final pouring and casting operation.
2. Casting the complete denture in vertical position, in a  
20 plaster die provided with inlet and risers, thereby preventing any deformation due to expansion or shrinking of the resin, or inclusion of blisters.



3. The use of hollow or partially hollow posterior teeth and filling of the hollow spaces with a light-curing resin, thereby accelerating the process and avoiding subsequent grinding and adjusting of the ready denture, while obtaining a close adherence to the mouth contours.

#### SHORT DESCRIPTION OF THE DRAWINGS

- Figure 1 is a plan view of a mandibular denture showing eight posterior teeth before their being filled with a light-curing resin,
- 10 Figure 2 is a vertical section through a plaster die for casting a mandibular denture,
- Figure 3 is a section of the denture of Figure 1, showing a tubular tooth with its top filled with a light-curing resin,
- Figure 4 is a section similar to that of Figure 3, but showing a partly hollowed-out tooth, and
- 15 Figure 5 is a section similar to that of Figure 3, but showing a tooth having hollow spaces at both ends.

#### DETAILED DESCRIPTION OF THE DRAWINGS

- The mandibular denture shown in Figure 1 comprises a denture base plate 1, six anterior teeth 2 of the conventional
- 20 kind, and eight posterior teeth 3 and 3' according to the present invention. The posterior teeth have hollowed-out cusp portions 4 and 4' which are to be filled with a light-curing resin during

the last fitting stage and are to be polymerized in the patient's mouth by means of a strong, concentrated light source.

Figures 3, 4 and 5 show different types of artificial teeth to be attached to the lateral portions of a ready base plate as indicated in Figure 1 by the numerals 3 and 3'. They include completely tubular teeth (Figure 3) as disclosed in my Israeli Patent No. 68802; teeth hollowed out in the cusp portion only (Figure 4), and teeth hollowed-out at both ends (Figure 5). The sections show the ready base plate 1, the occlusal rim portions 5, and the hollow portions 4, to be subsequently filled with a light-curing material.

Figure 2 illustrates the forming of a complete mandibular denture in a vertical plaster die 11 which is enclosed in a casing 12. The cavity 10 in the shape of the final base plate is produced by the lost wax method in a known manner, and liquid resin is poured into this cavity through an inlet funnel 13, superfluous material being permitted to rise in the riser 14. This method ensures casting of a dense body without any air or gas inclusions, true to the shape of the pattern plate.

It will be understood that not all aforedescribed novel steps should be combined in making an artificial denture, but that it may be possible to omit one or other without detriment to the outcome. On the other hand, the use of hollow or partly hollow artificial teeth for completing a denture and their filling with a light-curing material should be adhered to in order to shorten the process by one step at least.

**CLAIMS :-**

1. In a method of making artificial removable dentures, as defined in Israeli Patent No.68802, the steps of:

making a final base plate of a plastic material,

5 attaching to said base plate an occlusal rim of a known thermo-elastic material and using the said occlusal rim in a known manner to define the occlusal surfaces,

removing portions of said occlusal rim in successive steps and positioning artificial teeth into the thus-formed gaps, using  
10 conventionally formed teeth as anterior teeth and teeth provided with hollow cusp portions as posterior teeth,

casting a complete denture comprising said final base plate and said artificial teeth in a manner effecting open cavities in said posterior teeth,

15 filling said open cavities in said posterior teeth with a light-curing material to overflow, placing the denture into a patient's mouth and removing the superfluous light-curing material by masticating motions of the patient by rubbing contact with an opposite denture, and

20 polymerizing said light-curing material by a light source moved across said posterior teeth.


2. In the method claimed in Claim 1, the preparation of said final base plate, comprising the steps of  
making an impression of the mouth cavity,  
making two identical provisional baseplates by vacuum  
5 forming on said impression,  
making a pressing die by using as a pattern said two provisional base plates in contiguous alignment,  
making a trial base plate of a translucent material in said die,  
10 spreading a resin evenly and thinly on said trial base plate and making a final impression of the mouth cavity,  
preparing a final casting die by using as a pattern said resin-covered trial base plate, and  
making the final base plate of a translucent plastics  
15 material.
3. In the method as claimed in Claim 2, the step of preparing a die for casting said complete denture, comprising positioning said die with the surface of said cavity in vertical alignment, and providing an inlet funnel and a riser connecting  
20 the uppermost portions of said cavity with the atmosphere.
4. The method of Claim 1, wherein said posterior artificial teeth are tubular having a cavity passing through their entire length.

5. The method of Claim 1, wherein said posterior artificial teeth are provided with a cavity in the cusp portion.

6. The method as claimed in Claim 1, wherein said posterior artificial teeth are provided with cavities at their both ends.

7. The method of making an artificial removable denture substantially as hereinbefore described and illustrated in the accompanying drawing.

For the Applicant,

  
E.A. Glucksmann  
Patent Attorney

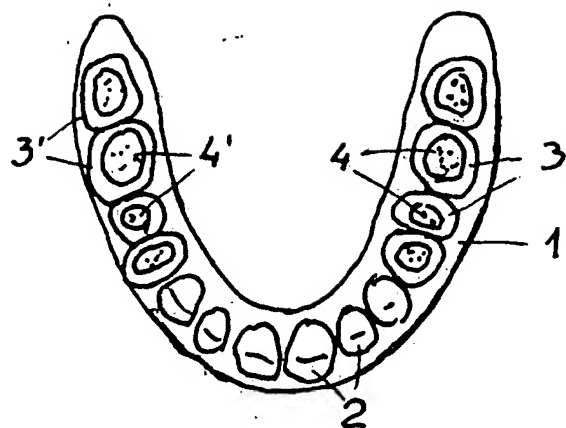


FIG. 1

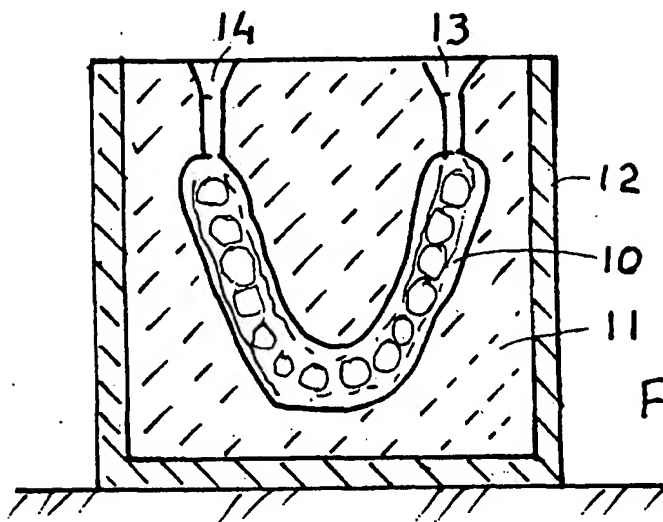


FIG. 2

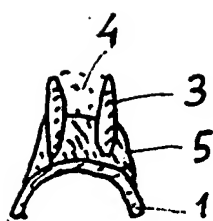


FIG. 3

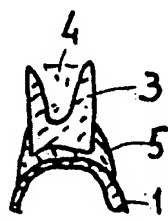


FIG. 4

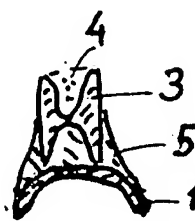


FIG. 5



## UNITED STATES PATENT AND TRADEMARK OFFICE

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JUN - 4 2007

HEAD, JOHNSON &amp; KACHIGIAN

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United States Patent and Trademark Office  
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www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/720,608

11/24/2003

Joseph J. Massad

M3330.003

4237

24118 7590 06/01/2007  
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TULSA, OK 74119

EXAMINER

WILSON, JOHN J

ART UNIT

PAPER NUMBER

3732

MAIL DATE

DELIVERY MODE

06/01/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**DOCKET RECEIVED  
ATTORNEY**JUN - 4 2007 *msk***ACTION DUE:  
SETUP;**~~*Transmitted 6/4/07*~~

<b>Interview Summary</b>	Application No.	Applicant(s)	
	10/720,608	MASSAD, JOSEPH J.	
	Examiner	Art Unit	
	John J. Wilson	3732	

All participants (applicant, applicant's representative, PTO personnel):

- (1) John J. Wilson. (3) Shawn Dellegar.  
 (2) Mark G. Kachigian. (4) \_\_\_\_\_.

Date of Interview: 24 May 2007.

Type: a) ☒ Telephonic b) ☐ Video Conference  
 c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.  
 If Yes, brief description: \_\_\_\_\_.

Claim(s) discussed: 6 and 9-15.

Identification of prior art discussed: Laszlo.

Agreement with respect to the claims f) ☐ was reached. g) ☒ was not reached. h) ☐ N/A.

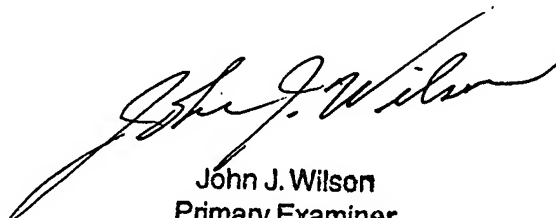
Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: The proposed amendment, see attachment, would overcome the applied reference to Laszlo which does not show an undercut. The proposed amendment contains features such as the undercut which have not been previously considered and would require further search and/or consideration.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

*Attachment:*

☒ *Proposed Amendment*

  
 John J. Wilson  
 Primary Examiner

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

\_\_\_\_\_  
 Examiner's signature, if required



*Proposed Amendment  
for discussion only*

PATENT  
GLO255/06095  
Customer No. 24,118

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: JOSEPH J. MASSAD )  
SERIAL NO.: 10/720,608 )  
FILED: NOVEMBER 24, 2003 )  
FOR: METHOD FOR DEVELOPING )  
BALANCED OCCLUSION IN )  
DENTISTRY )  
GROUP ART UNIT: 3732 )  
EXAMINER: JOHN J. WILSON )

**DRAFT AMENDMENT FOR DISCUSSION PURPOSES**

Mail Stop AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Please reexamine the above-identified application in view of the following amendments and remarks.

I hereby certify that this correspondence is being filed electronically with the Commissioner for Patents on May 21, 2007.

---

**IN THE CLAIMS:**

1           1.       (Withdrawn) A method for establishing balanced occlusion in dentistry comprising:  
2                   installing at least one special tooth as posterior teeth in one denture of a dental  
3       prosthesis with each special tooth provided with a receptacle that opens in the direction of opposing  
4       teeth,

5                   installing the denture in identical physical relationship to the physiology of the  
6       patient's mouth for whom the dental prosthesis is being created,

7                   inserting synthetic resin into the receptacle of each of the special teeth in excess of  
8       the amount needed to completely fill the receptacle,

9                   closing the denture while holding the denture the proper distance apart from the  
10       opposing teeth for the physiology of the patient's mouth and moving the denture in all eccentric  
11       positions relative to the opposing teeth at an orientation that matches movement created by the  
12       physiology of the patient's mouth to mold the resin into mating occlusal surfaces for the special teeth  
13       by using the opposing teeth as a molding instrument,

14                   allowing the resin to cure, and

15                   trimming excess resin from the special teeth.

1           2.       (Withdrawn) A method for establishing balanced occlusion in dentistry according  
2       to Claim 1 further comprising the following step that occurs before closing the denture:

3                   installing a central bearing device to the denture so that the central bearing devices  
4       holds the denture the proper distance apart from the opposing teeth for the physiology of the patient's

mouth and allows the denture to move relative to the opposing teeth at an orientation that matches movement created by the physiology of the patient's mouth.

3. (Withdrawn) A method for establishing balanced occlusion in dentistry comprising:  
installing special posterior denture teeth with receptacles that open in the direction of opposing teeth on a dental implant supported restoration in the patient's mouth,  
inserting synthetic resin into the receptacle of each of the special teeth in excess of the amount needed to completely fill the receptacle,  
closing the mouth and moving the mouth in all eccentric positions to mold the resin into mating occlusal surfaces for the special teeth by using the patient's opposing teeth as a molding instrument,  
allowing the resin to cure, and  
trimming excess resin from the special teeth.

4. (Withdrawn) A method for establishing balanced occlusion in dentistry comprising:  
installing at least one special tooth as a posterior tooth in a partial denture of a dental prosthesis with each special tooth provided with a receptacle that opens in the direction of opposing teeth,  
installing the denture in identical physical relationship to the physiology of the patient's mouth for whom the dental prosthesis is being created,  
inserting synthetic resin into the receptacle of each of the special teeth in excess of the amount needed to completely fill the receptacle,

9 closing the dentures while holding the dentures the proper distance apart for the  
10 physiology of the patient's mouth and moving the dentures in all eccentric positions relative to each  
11 other at an orientation that matches movement created by the physiology of the patient's mouth to  
12 mold the resin into mating occlusal surfaces for the special teeth by using the posterior teeth  
13 provided in the opposing plate as a molding instrument,

14 allowing the resin to cure, and

15 trimming excess resin from the special teeth.

1 5. (Withdrawn) A method for establishing balanced occlusion in dentistry according  
2 to Claim 4 further comprising the following step that occurs before closing the dentures:

3 installing a central bearing device in both dentures of the dental prosthesis so that the  
4 central bearing devices holds the dentures the proper distance apart for the physiology of the patient's  
5 mouth and allows them to move relative to each other at an orientation that matches movement  
6 created by the physiology of the patient's mouth.

1 6. (Currently Amended) A special denture tooth for use in a removable dental  
2 prosthesis, comprising:

3 a special denture tooth for insertion into a removable dental prosthesis, said denture  
4 tooth provided with sides to form with a receptacle located centrally between the sides, at least one  
5 undercut area in the receptacle to retain a resin material which fillings the receptacle and the  
6 undercut area to form the occlusal surface of the ~~special~~ denture tooth, the contour of said occlusal  
7 surface conforming to and having been molded by interaction with opposing teeth.

1           7.     (Withdrawn) A central bearing device for use in dentistry comprising:

2                     a central bearing plate assembly attachable to the roof of a maxillary plate, a central  
3     bearing plate attachable to the central bearing plate assembly, said central bearing plate having a  
4     composite angle that matches a patient's specific incisors protrusive inclination and condyle  
5     protrusive inclination,

6                     a central bearing pin assembly attachable to the lingual flanges of the mandibular  
7     plate, a central bearing pin bushing attachable to at least one central opening provided along the  
8     median of said central bearing pin assembly, and a central bearing pin adjustably attached to said  
9     central bearing pin bushing so that the central bearing pin can be adjusted in height to contact the  
10    central bearing plate in order to establish the proper vertical spacing between the maxillary and  
11    mandibular plate, and

12                    a locking nut engaging the central bearing pin to lock the central bearing pin at the  
13    desired height.

1           8.     (Withdrawn) Dental occlusal surfaces on teeth comprising:

2                     occlusal surfaces on teeth created by using a moldable resin on the teeth and then  
3     employing the opposing teeth to sculpt the resin by moving the teeth relative to each other in all  
4     eccentric positions with the teeth closed relative to each other and while maintaining proper vertical  
5     spacing of the opposing teeth.

1           9.     (Currently Amended) A special denture tooth housing for use in a removable dental  
2     prosthesis, comprising:

3                 a special denture tooth housing for insertion into a removable dental prosthesis, said  
4     tooth housing provided with sides ~~and with~~ to form a receptacle located centrally between the sides;

5                 at least one undercut area in the receptacle of the tooth housing;

6                 an initially formable resin material fillings the receptacle and the undercut area of the  
7     tooth housing which cures to a solid to form an occlusal surface of the special tooth; and

8                 ~~means to establish vertical spacing between a maxillary and an opposing mandibular~~  
9     ~~of said dental prosthesis with a central bearing device received in a mouth of a patient to maintain~~  
10    a proper relative vertical relationship between maxillary and mandibular components of said dental  
11    prosthesis through all eccentric movements such so that the contour of said occlusal surface of said  
12    special tooth housing conforms to and is molded by interaction with opposing teeth of the patient.

1           10.    (Currently Amended) A tooth as set forth in Claim 6 wherein said denture tooth is  
2     comprised of ~~porcelain, hardened processed acrylic~~ synthetic resin or metal.

1           11.    (Currently Amended) A tooth housing as set forth in Claim 9 wherein said denture  
2     tooth housing is composed of ~~porcelain, hardened processed acrylic~~ synthetic resin or metal.

1           12.    (New) A tooth as set forth in Claim 6 wherein said synthetic resin is an acrylic resin,  
2     a composite resin or a combination of acrylic and composite resins.

1           13.   (New) A tooth housing as set forth in Claim 9 wherein said synthetic resin is an  
2 acrylic resin, a composite resin or a combination of acrylic and composite resins.

1           14.   (New) A tooth as set forth in Claim 6 further comprising a removable occlusal insert  
2 adapted to be inserted in the receptacle prior to the receptacle being filled with the resin.

1           15.   (New) A tooth housing as set forth in Claim 9 further comprising a removable  
2 occlusal insert adapted to be inserted in the receptacle prior to the receptacle being filled with the  
3 resin.

## REMARKS

The Office Action dated March 6, 2007 has been fully considered by the Applicant. In response, Applicant has amended independent Claims 6 and 9, amended dependent Claims 10 and 11 and added dependent Claims 12-15 in order to more clearly distinguish the present invention from the prior art. For the reasons stated below, Applicant now believes the application to be in condition for allowance.

The rejection of dependent Claims 10 and 11, as now amended, under 35 U.S.C. § 112, first paragraph, is respectfully traversed. Claims 10 and 11 provide an additional limitation of Claims 6 and 9, respectively, of the denture tooth composed of a synthetic resin (*i.e.*, an acrylic resin, a composite resin or a combination of acrylic and composite resins) or a metal. The disclosure at Page 1, lines 14 through 16 teach the tooth made of a suitable synthetic resin, while the disclosure at Page 8, line 17 through Page 9, line 13 teach the tooth made of metal.

The rejection of independent Claim 6, as now amended, under 35 U.S.C. § 102 as anticipated by Laszlo (IL 83447 A) is respectfully traversed. The Examiner cited an abstract of the Laszlo Israeli patent. Applicant has obtained a full English language version of the patent which is submitted herewith. Laszlo provides a mandibular denture having a plurality of posterior teeth which have hollowed-out cusps which are to be filled with a resin for casting. In contrast, the claimed invention is directed to a denture tooth having sides with a receptacle located centrally between the sides. The receptacle of the claimed invention is provided with at least one undercut area 132 so that when resin is placed in the receptacle, the resin will fill the undercut area and, upon hardening, the resin will be more securely retained in the receptacle of the special denture tooth. In addition, the claimed



invention may include a removable occlusal insert 114 that provides a groove in which the lingual cusps of the upper posterior teeth rest when the partially completed dentures are in centric relation position. The removable inserts will be removed from the denture tooth's receptacle prior to the receptacle being filled with the resin. (Page 41, line 3 through Page 42, line 11).

As now amended, independent Claims 6 and 9 clearly convey that the claimed invention comprises a denture tooth housing inserted into a removable dental prosthesis, wherein the denture tooth has a receptacle with at least one undercut area to help retain the resin upon hardening, in contrast to the Laszlo invention. The claimed invention may also include removable inserts in the receptacle of the denture tooth.

The rejection of Claim 9, as now amended, under 35 U.S.C. §103 as unpatentable over Laszlo in view of Opotow (U.S. Patent No. 2,309,270) is respectfully traversed. As set forth above, the Laszlo reference is clearly distinguishable from the claimed invention. Additionally, Claim 9 provides an additional limitation of a central bearing device which maintains a proper relative vertical relationship between maxillary and mandibular components of the dental prosthesis through all eccentric movements. The central bearing device allows the contour of the occlusal surface of the denture tooth to conform to and be molded by the interaction with the patient's opposing teeth. Opotow is a bearing device which is not receivable with the mouth of the patient and is thus ineffective in contour molding of the denture tooth's occlusal surface. In the absence of a central bearing device, functionally generating occlusal surfaces in the mouth (regardless of material used) is impossible from a practical standpoint. Accordingly, the combination of Laszlo and Opotow taken together do not meet the limitations of the claimed invention.

It is believed that the foregoing is fully responsive to the outstanding Office Action. It is submitted that the application is now in condition for allowance and such action is earnestly solicited.

Respectfully submitted,

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Date: May 21, 2007